```
{\setlength{\TabTitreL}{1cm}
\begin{MonTableau}{3}{6}{.75}

\small

\TabNewCol{0}
\rTabPut{Br}{-.15}{.25}{$x$}
\rTabPut{Br}{-.15}{.40}{$x$}
\rTabPut{Br}{-.15}{.40}{$x^2-12$}
\rTabPut{Br}{-.15}{.40}{$f(x)$}

\TabNewCol{0}
\rTabPut{Bl}{.15}{.25}{$-\infty$}

\TabNewCol{.25}
\rTabPut{B}{0}{.25}{$-2\sqrt{3}$}
\rTabPut[1]{B}{0}{.40}{}
\rTabPut[2]{B}{0}{.40}{\TabZ}
\rTabPut[2]{B}{0}{.40}{\TabZ}

\TabNewCol{.5}
\rTabPut{B}{0}{.25}{\TabZ}
\rTabPut[2]{B}{0}{.40}{\TabZ}
\rTabPut[1]{B}{0}{.40}{}
\rTabPut[2]{B}{0}{.40}{\TabZ}

\TabNewCol{.75}
\rTabPut{B}{0}{.25}{$2\sqrt{3}$}
\rTabPut[1]{B}{0}{.40}{}
\rTabPut[2]{B}{0}{.40}{\TabZ}
\rTabPut[2]{B}{0}{.40}{\TabZ}

\TabNewCol{1}
\rTabPut{Br}{-.1}{.25}{$+\infty$}

\rput(.125,.5){$-$}\rput(.375,.5){$-$}\rput(.625,.5){$+$}\rput(.875,.5){$+$}
\rput(.125,1.5){$+$}\rput(.375,1.5){$-$}\rput(.625,1.5){$-$}\rput(.875,1.5){$+$}
\rput(.125,2.5){$-$}\rput(.375,2.5){$+$}\rput(.625,2.5){$-$}\rput(.875,2.5){$+$}

 \end{MonTableau}}
```

Ce qui donne :

1. $\forall x \in \mathbb{R} \quad f(x) = x(x-2\sqrt{3})(x+2\sqrt{3})$.
2. Un produit de facteur est nul si, et seulement si, au moins est de ses facteurs est nul :

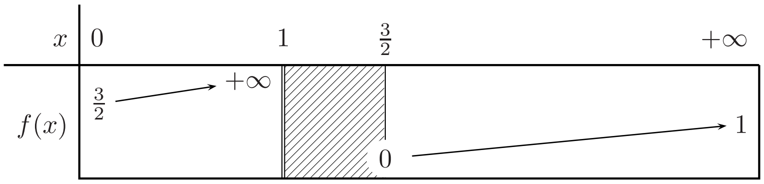
$$f(x) = 0 \Leftrightarrow x \in \{-2\sqrt{3}; 0; 2\sqrt{3}\}$$

3. Tableau de signes ci-contre :

$$f(x) < 0 \Leftrightarrow x \in]-\infty; -2\sqrt{3}[\cup]0; 2\sqrt{3}[$$

x	$-\infty$		$-2\sqrt{3}$		0		$2\sqrt{3}$		$+\infty$
x		$-$		$-$	0	$+$		$+$	
x^2-12		$+$	0	$-$		$-$	0	$+$	
$f(x)$		$-$	0	$+$	0	$-$	0	$+$	

```
{\setlength{\TabTitreL}{1cm}
\begin{MonTableau}{1}{9}{1.5}

\psframe[style=hachured,linestyle=none](.3,1)(.45,0)

\TabNewCol{0}
\rTabPut{Br}{-.15}{.25}{$x$}
\rTabPut{Br}{-.15}{.40}{$f(x)$}

\TabNewCol{0}
\rTabPut{Bl}{.15}{.25}{$0$}
\rTabPut{Bl}{.15}{.60}{$\frac{3}{2}$}

\TabNewCol{.30}
\rTabPut{B}{0}{.25}{$1$}
\rTabPut{Br}{-.15}{.80}{$+\infty$}
\psline[style=TabDblBarre](.3,0)(.3,1)

\TabNewCol{.45}
\rTabPut{B}{0}{.25}{$\frac{3}{2}$}
\rTabPut[2]{B}{0}{.10}{\TabZ}

\TabNewCol{1}
\rTabPut{Br}{-.15}{.25}{$+\infty$}
\rTabPut{Br}{-.15}{.40}{$1$}

\TabFleche{B1}{C1}
\TabFleche{D1}{E1}

\end{MonTableau}}
```



```
\begin{MonTableau}{6}{12}{1.2}

\TabNewCol{0}
\rTabPut{B}{-.75}{.25}{$t$}
\rTabPut{B}{-.75}{.20}{\TabTitre{Sgn.}{x'(t)}}
\rTabPut{B}{-.75}{.20}{\TabTitre{Var.}{x}}
\rTabPut{B}{-.75}{.20}{\TabTitre{Var.}{y}}
\rTabPut{B}{-.75}{.20}{\TabTitre{Sgn.}{y'(t)}}
\rTabPut{B}{-.75}{.40}{$\vec{T}$}
\rTabPut{B}{-.75}{.40}{$m_T$}

\TabNewCol{0}
\rTabPut{B}{.5}{.25}{$0$}
\rTabPut{B}{.5}{.40}{$1,5$}
\rTabPut{B}{.5}{.40}{$2$}
\rTabPut{B}{.5}{.15}{$0$}
\rTabPut{B}{.5}{.40}{$1,5$}
\rTabPut{B}{.5}{.40}{$\coordp{1,5}{1,5}$}
\rTabPut{B}{.5}{.40}{$1$}

% On recopie 4 fois cette dernière colonne et on ajuste
\TabNewCol{.25}
\rTabPut{B}{0}{.25}{$1$}
\rTabPut{B}{0}{.40}{$0$}
\rTabPut{B}{0}{.75}{$4$}
\rTabPut{B}{0}{.60}{$4$}
\rTabPut{B}{0}{.40}{$3$}
\rTabPut{B}{0}{.40}{$\coordp{0}{3}$}
\rTabPut{B}{0}{.40}{$\infty$}

\TabNewCol{.5}
\rTabPut{B}{0}{.25}{$2$}\rTabPut{B}{0}{.40}{$-1.5$}
\rTabPut{B}{0}{.40}{$2$}\rTabPut{B}{0}{.75}{$6$}
\rTabPut{B}{0}{.40}{$0$}\rTabPut{B}{0}{.40}{$\coordp{-1.5}{0}$}
\rTabPut{B}{0}{.40}{$0$}

\TabNewCol{.75}
\rTabPut{B}{0}{.25}{$3$}\rTabPut{B}{0}{.40}{$0$}
\rTabPut{B}{0}{.15}{$0$}\rTabPut{B}{0}{.60}{$4$}
\rTabPut{B}{0}{.40}{$-2$}\rTabPut{B}{0}{.40}{$\coordp{0}{-2}$}
\rTabPut{B}{0}{.40}{$\infty$}

\TabNewCol{1}
\rTabPut{B}{-.5}{.25}{$4$}\rTabPut{B}{-.5}{.40}{$1$}
\rTabPut{B}{-.5}{.40}{$2$}\rTabPut{B}{-.5}{.15}{$0$}
\rTabPut{B}{-.5}{.40}{$1,5$}\rTabPut{B}{-.5}{.40}{$\coordp{1}{-1}$}
\rTabPut{B}{-.5}{.40}{$-1$}

% les signes + et - on fait tout simplement
\rput(.145,0.5){$+$}\rput(.145,3.5){$+$}
\rput(.375,0.5){$-$}\rput(.375,3.5){$+$}
\rput(.625,0.5){$-$}\rput(.625,3.5){$-$}
\rput(.850,0.5){$+$}\rput(.850,3.5){$-$}

% les flèches
\TabFleche{B2}{C2}\TabFleche{C2}{D2}\TabFleche{D2}{E2}\TabFleche{E2}{F2}
\TabFleche{B3}{C3}\TabFleche{C3}{D3}\TabFleche{D3}{E3}\TabFleche{E3}{F3}

\TabTitreFerme\TabFerme
\end{MonTableau}
```

t	0		1		2		3		4
Sgn. $x'(t)$	$1,5$	$+$	0	$-$	-1.5	$-$	0	$+$	1
Var. x	2	$\nearrow$	4	$\searrow$	2	$\searrow$	0	$\nearrow$	2
Var. y	0	$\nearrow$	4	$\nearrow$	6	$\searrow$	4	$\searrow$	0
Sgn. $y'(t)$	$1,5$	$+$	3	$+$	0	$-$	-2	$-$	$1,5$
$\vec{T}$	$\begin{pmatrix}1,5\\1,5\end{pmatrix}$		$\begin{pmatrix}0\\3\end{pmatrix}$		$\begin{pmatrix}-1.5\\0\end{pmatrix}$		$\begin{pmatrix}0\\-2\end{pmatrix}$		$\begin{pmatrix}1\\-1\end{pmatrix}$
m_T	1		∞		0		∞		-1